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SAN TELEQUIP
Connecting. Converting. Leading !

Document Name : User Manual for SC10B : RS232 to Bluetooth Converter.

SC10B is Bluetooth V.2.0-certified and is backward compatible with v1.1/1.2 devices. You can connect between your computers (Master) and RS232 devices (Slave) 100 meters away without cables in your working environments.
Security of Bluetooth wireless communication is very strong because it uses the frequency hopping and 128bit encryption in 2.4Ghz frequency range. One pair of SC10B will try to connect automatically whenever Powered On after finishing the device's parameters configuration. It does not require extra software for operation. No installation of driver and application software.

It supports Win 98 / Me / 2000 / XP / XPx64

Product Specification

Serial Port

RS-232	: 1 Port, DB9 female
Speed	: 1200 bps to 115.2 Kbps
Parity	: None, Odd, Even
Data Bit	: 8
Stop Bit	: 1, 2
Flow Control	: Hardware, Xon / X0ff, None
Socket Status/Control	: DTR/DSR, RTS/CTS
RS-232 Signals	: Rx, Tx, GND, RTS, CTS, DTR, DSR

Bluetooth Port

Bluetooth	: 1 Port
Compliance	: With Bluetooth v2.0+ EDR

Support Bluetooth Serial port profile (SPP)
Operate in 2.4GHz – 2.483GHz ISM Band
Support Bluetooth Radio with Class 1 & 2 RF

Operating Distance	: Up to 100 Meters
Power	: 5V DC / 200mA, 80mA
Led Indications	: SYS (Red), Pairing (Green)

Environment

Operating Temperature	: 0℃ to 60℃
Storage Temperature	: -25℃ to 70℃
Dimensions	: 65 * 30 * 12 mm (not including antenna)
Weight	: 35 gm

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Product description

DC-In Power Outlet
The SC10B Bluetooth to RS232 is powered by a single 5V DC 200 mA Power supply. Power SC10B through the adapter. If the Power is properly supplied, the red color LED will glow.

Antenna Connector
The connector for antenna is a standard Reverse SMA jack. Simply connect it to a 2.0dBi dipole, 50 Ohms impedance and 2.4GHz frequency antenna. (The Antenna is changeable for high gain Antenna)

Serial Port : RS-232
Connect the RS-232 port to the Serial device.

Set-up Button
This is to the left side of the SC10B. The purpose is to synchronize between SC10B device and "BT RS232 Config Tool" software. After finishing the parameter setup of "BT RS232 Config Tool" software, when you click the icon of "Connect" in "BT RS232 Config Tool" software, use any point tip to push this button You will see the icon of "Connect" turn into "Disconnect" and this means successful activation of the device. The Read & Write Icons will turn active & the version no's is displayed.

LED Indicators
Red Color LED : Power indicator
Green Color LED : Before synchronizing green LED will blink.
After synchronizing the Red & Green LED will be blink alternately

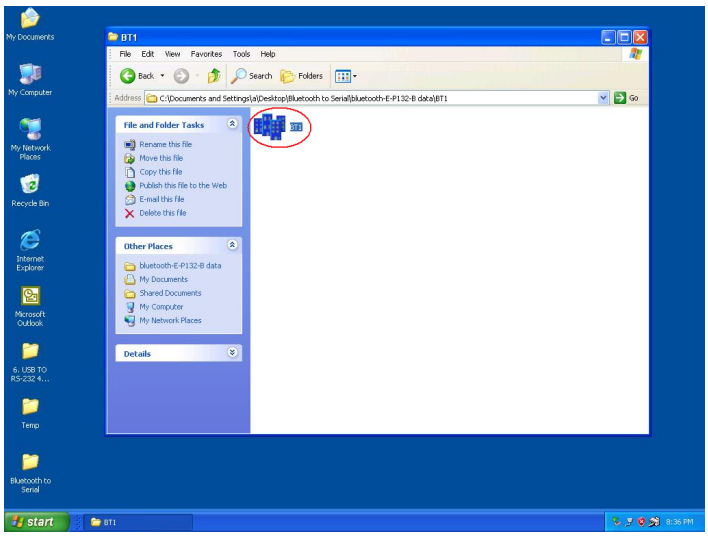
SC10B Hardware Installation

Connect SC10B Bluetooth adapter to COM Port of PC and connect Power adapter. You will see the Red LED is On and the Green LED blinks.

After running the BT RS232 Config Tool and finishing configuration, Click the icon of "Connect" in Tool software and press the SET-UP button immediately. The Green & Red LED will blink alternatively. SC10B is active.

There are two types of RS232 devices in field. One is DTE - Data Terminal Equipment (such as a PC) and the other one is DCE - Data Communication Equipment (such as a Modem). You can setup your SC10B accordingly.

BT RS232 Config Tool Installation & Setup



When setting up SC10B adapter for the first time, you have to install and run "BT1.exe" / "BT RS232 config tool" in your computer. The utility CD is enclosed in the device box.
All the SC10B Bluetooth to RS-232 devices must be configured first before you use it. The purpose of configuration is to pair two SC10B devices for an exclusive connection between them, and pairing is done by utilizing Bluetooth address and PIN code

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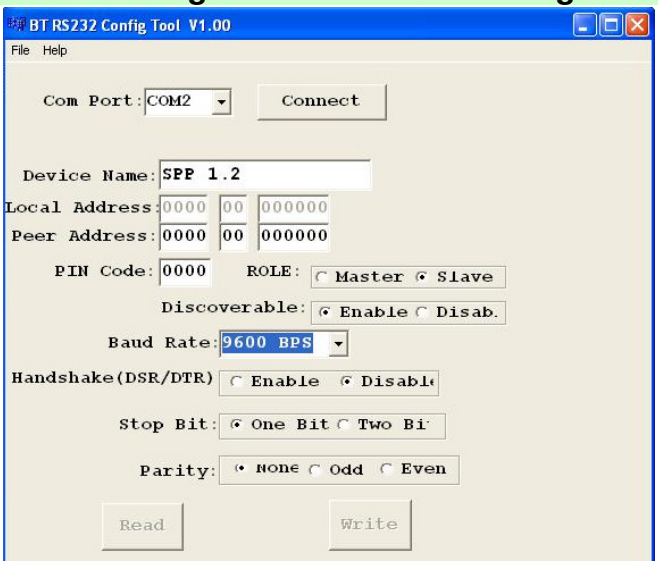
SC10B Config Tool Parameters Configuration



Double click the icon of BT1 / "BT RS232 Config Tool", the configuration screen will be pop-up

COM Port
Select COM port number, you have to avoid the port conflict with other device in computer and use available port number

Device Name
Select device name for identifying each one device. You can use the same name or retype the new name.

Local Address
Local address will be automatically changed after finishing the parameter configuration.

Peer Address
Peer address is for two or more devices to communicate in a same network address.

PIN Code
PIN code is for the purpose of security consideration. Device uses this "PIN Code" to identify during connection and communication.

Role
Role is for identifying a role of the device as a Master or Slave. In "Master", SC10B will play like a DTE mode - Data Terminal Equipment (such as a PC). In "Slave", SC10B will be play like a DCE - Data Communication Equipment (such as a Modem)

Discoverable
Allowing (or not) SC10B to be detected by other Bluetooth devices.

Baud Rate
From 1200 bps to 115.2K bps. Default is 9600

Handshake (DSR/DTR, RTS/CTS)
Default is "Disable".

Stop Bit
Default is "One Bit". Select from 1 or 2

Parity
Default is "None" . Choose from None, Odd, Even

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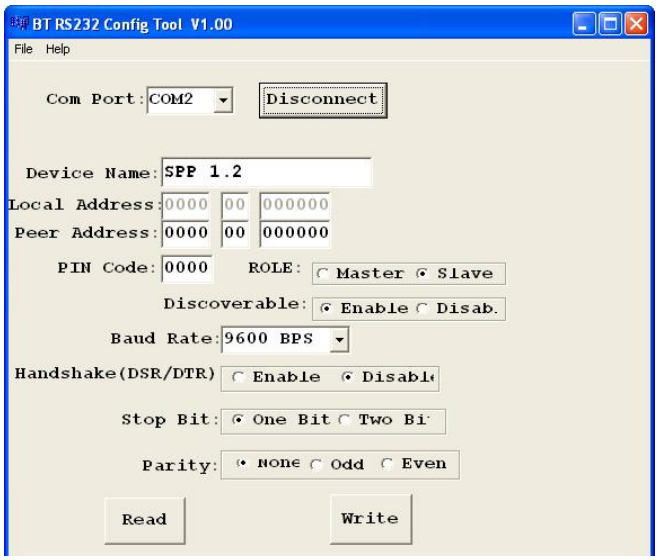
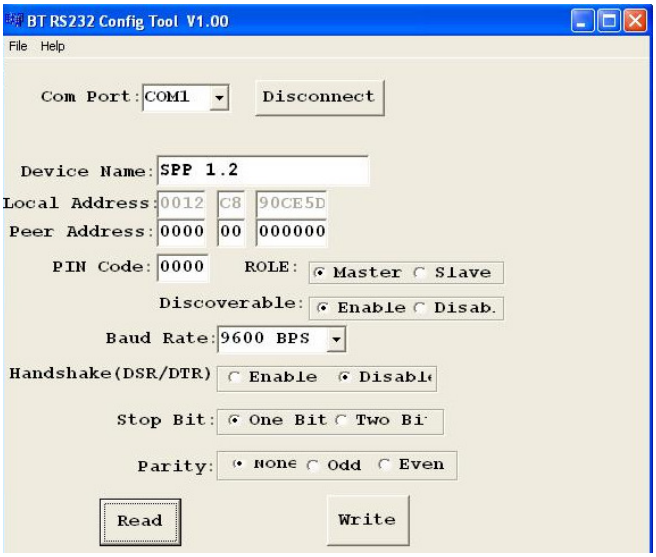
Apply "Connect"

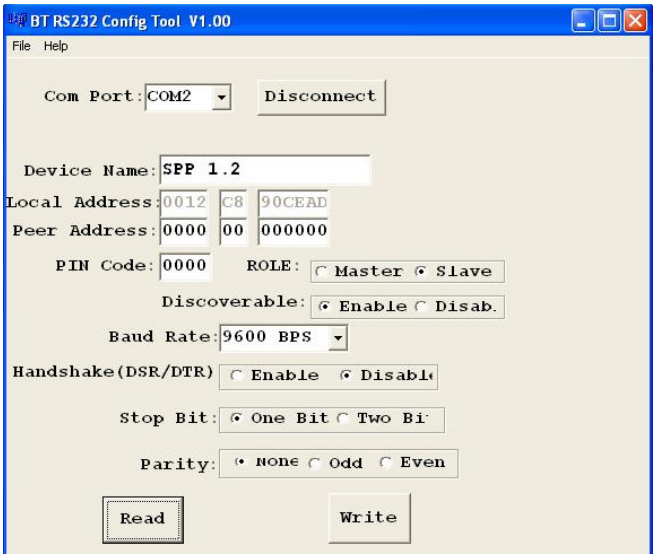


After finish the parameters configuration, click the icon of "Connect" in BT RS232 Config Tool screen and press the SET-UP button immediately on the left side of the device.
Next screen of parameters configuration will pop-up. The icon of "Connect" changes to "Disconnect" and two icons will be turned into active mode on the bottom of the BT232 Config Tool screen.

Apply "Read"

"Read", means load all last saved parameters from the "BT232 Config Tool". The local address will be updated as the real device address.





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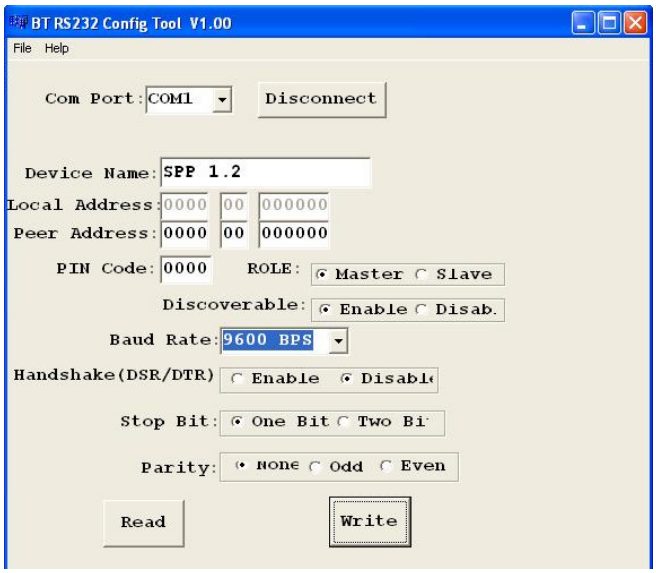
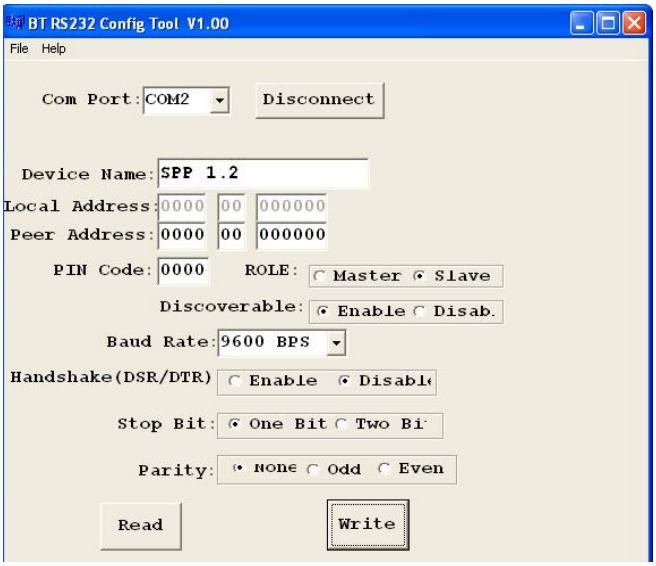
Apply "Write"





RS-232 Pin Assignment

DSUB-9 PIN details

Pin 1	NC	Pin 6	DTR (data output)
Pin 2	TXD (Output)	Pin 7	CTS (data input)
Pin 3	RXD (Input)	Pin 8	RTS (data output)
Pin 4	DSR (Input)	Pin 9	DC 5v power (in)
Pin 5	GND		

Remark : PIN CODE : 1234
: Default setup value : 9600, N, 8, 1